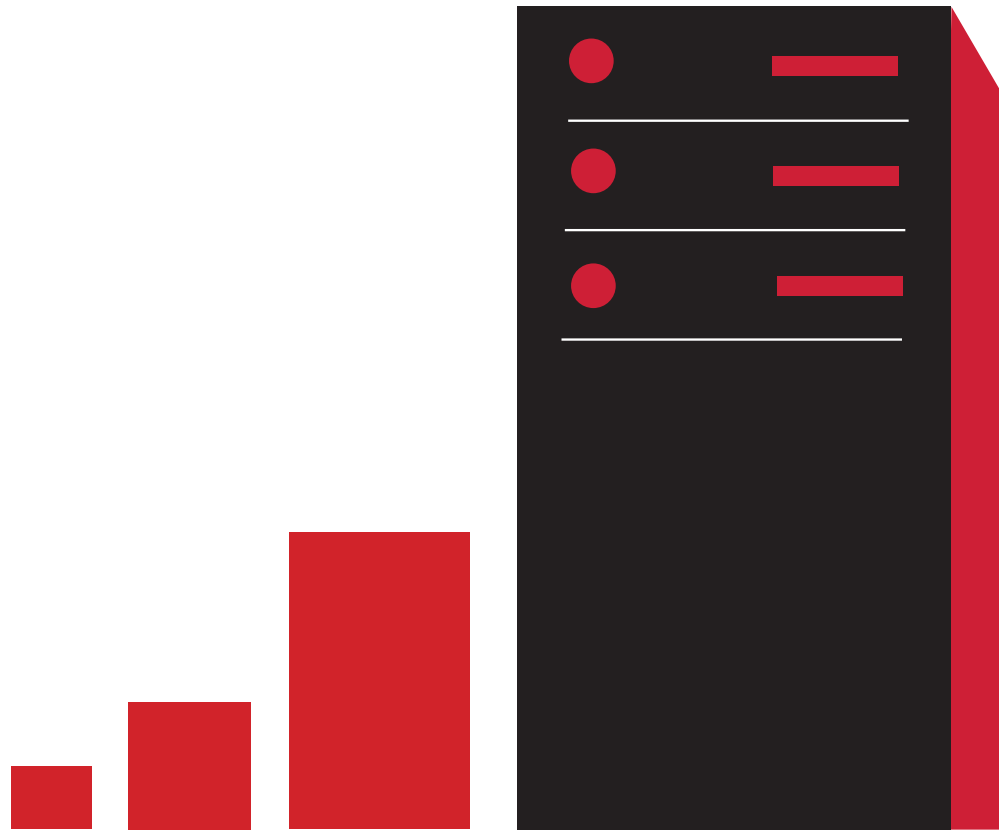


THE US DATA CENTER MARKET: POWERING THE AI ECONOMY



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The rapid expansion of cloud computing and artificial intelligence is driving one of the largest digital infrastructure investment cycles in modern economic history. As hyperscale technology companies accelerate capital expenditures to support growing compute demand, the US data center market is experiencing historically tight supply conditions, rapid geographic expansion, and increasing institutional investor interest.

- Hyperscale capital expenditures are projected to reach approximately \$660 billion in 2026, nearly tripling in just two years, supported by continued growth in cloud revenues and accelerating enterprise AI adoption.
- US data center demand has accelerated dramatically, with net absorption increasing from 6.4 gigawatts (GW) in 2023 to 16.9 GW in 2025, while first quarter 2026 leasing activity reached a record 9.5 GW.
- Power availability has become the primary constraint on new development, reshaping the geography of the sector as hyperscale operators increasingly expand beyond traditional primary markets into frontier markets offering scalable power, land, and fiber connectivity.
- Supply remains exceptionally constrained despite record construction activity. As of Q1 2026, approximately 25.7 GW was under construction in the US, with roughly 93% of capacity already pre-leased prior to delivery.
- Historically low vacancy rates and constrained power availability have driven substantial rental growth and strengthened owner economics, while growing institutional capital flows into digital infrastructure continue to support liquidity and long-term demand for stabilized data center assets.

DIGITAL INFRASTRUCTURE INVESTMENT CONTINUES TO ACCELERATE

The buildout of digital infrastructure has become one of the most important drivers of US economic growth. As cloud computing and artificial intelligence (“AI”) adoption continue to expand rapidly across the economy, investment in data centers, power infrastructure, networking equipment, and related supply chains has accelerated to unprecedented levels. The emergence of generative AI has intensified this trend, as training and operating advanced AI models requires enormous amounts of computational power, driving a sharp increase in demand for hyperscale data center capacity. Enterprises are increasingly embedding AI into core operations, while consumer adoption has also accelerated rapidly. As a result, hyperscale cloud providers are undertaking one of the largest capital investment cycles in modern economic history.

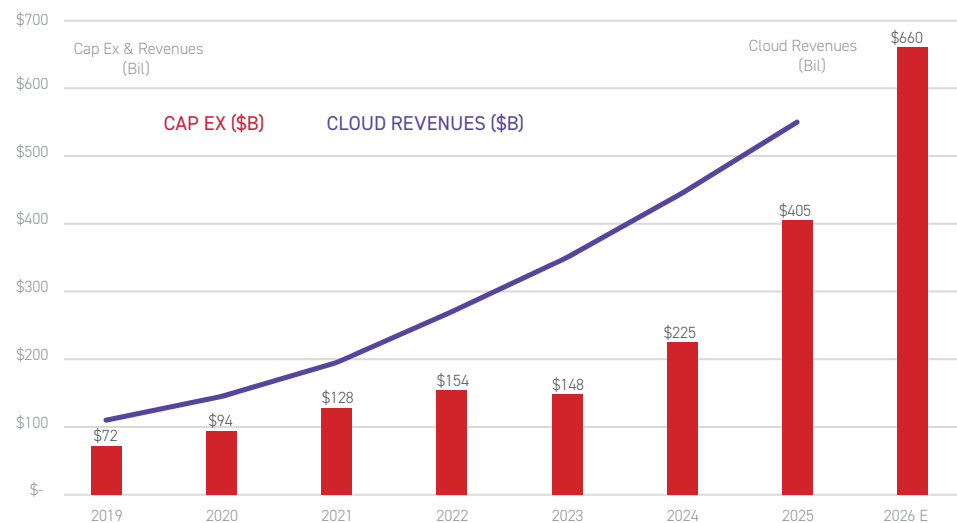
The scale of this investment is now large enough to meaningfully influence broader macroeconomic growth. Beyond direct expenditures on servers and semiconductors, data center development drives substantial downstream investment in power generation,

electrical equipment, transmission infrastructure, engineering services, and construction labor. Various economic estimates suggest that AI and data center-related investment directly accounted for approximately 35%–40% of total US GDP growth in 2025.

This expansion appears poised to accelerate further. As shown in *Exhibit 1*, capital expenditures by the five largest hyperscale technology companies are projected to increase to approximately \$660 billion in 2026. This compares to approximately \$405 billion in 2025 and represents nearly a tripling of annual capital expenditures in just two years.

These investment decisions are being supported by continued growth in underlying cloud revenues, which have largely kept pace with the rapid increase in capital expenditures, as shown in *Exhibit 1*. Combined cloud revenues for the largest hyperscale platforms reached an annualized run rate of approximately \$508 billion as of the first quarter of 2026, reflecting the sustained expansion of enterprise cloud adoption and accelerating demand for AI-enabled services. Hyperscalers continue to characterize the market environment as supply constrained, with available compute capacity remaining insufficient to satisfy customer demand. For example, Alphabet recently reported that its Google Cloud backlog “nearly doubled quarter-on-quarter to over \$460 billion,” driven by strong demand for enterprise AI offerings and TPU hardware sales.

EXHIBIT 1: HYPERSCALER CAPITAL EXPENDITURES VS. CLOUD REVENUES*



* Hyperscaler capital expenditures for Amazon, Alphabet, Meta, Microsoft, and Oracle. Cloud revenues for the same firms except Meta.

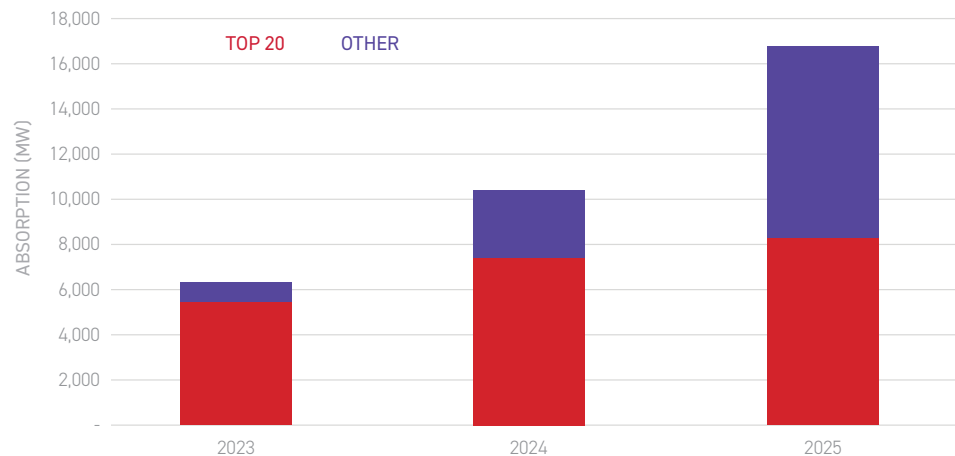
Source: Company Financials & Quarterly Earnings Calls, Affinius Capital Research.

As a result, demand for data center capacity has continued to accelerate at an unprecedented pace. Net absorption increased from 6.4 GW in 2023 to 9.6 GW in 2024 and reached 16.9 GW in 2025. Momentum has continued into 2026, with first quarter net absorption totaling approximately 9.5 GW, representing the strongest quarterly leasing volume ever recorded in the sector.

While construction activity has accelerated, the market remains fundamentally supply constrained, with demand continuing to outpace the ability to deliver energized capacity across most major markets. Importantly, the primary constraint on new development is access to power. The US grid currently supports approximately 36 GW of data center load, yet industry forecasts suggest total demand could approach 80 GW by 2030, requiring a substantial expansion of generation, transmission, and substation infrastructure. Across major US markets, interconnection queues have lengthened materially, with estimated delivery timelines now extending four to seven years in many large metros and as long as five to ten years in Northern Virginia, Columbus, and Northern California.

These power constraints are reshaping the geography of data center development. Historically, net absorption was heavily concentrated in a relatively small group of established primary markets benefiting from dense fiber connectivity, large existing ecosystems, and proximity to enterprise demand centers. In 2023, approximately 85% of total US net absorption occurred within primary data center markets. However, as power availability within many core markets has become increasingly constrained, hyperscale operators and developers have been forced to expand into a broader set of secondary and frontier markets capable of offering large-scale power delivery within commercially acceptable timeframes. By 2025, over 50% of total net absorption occurred outside traditional primary markets, as shown in *Exhibit 2*.

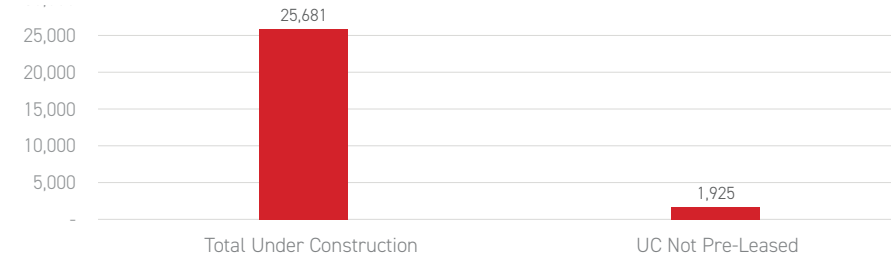
EXHIBIT 2: US DATA CENTER NET ABSORPTION, TRADITIONAL TOP 20 MARKETS VS. OTHER MARKETS



Source: datacenterHawk, Affinius Capital Research.

The extent of these supply constraints is further illustrated by current development activity. As of Q1 2026, approximately 25.7 GW of data center capacity was under construction across the United States, and approximately 93% of this capacity was already pre-leased, underscoring the degree to which hyperscale demand continues to outpace available supply, as shown in *Exhibit 3*. The composition of the development pipeline also highlights the ongoing geographic shift occurring within the industry. Of the 25.7 GW currently under construction, approximately 10.6 GW is located within traditional primary markets, while 15.1 GW is being developed in frontier and emerging markets.

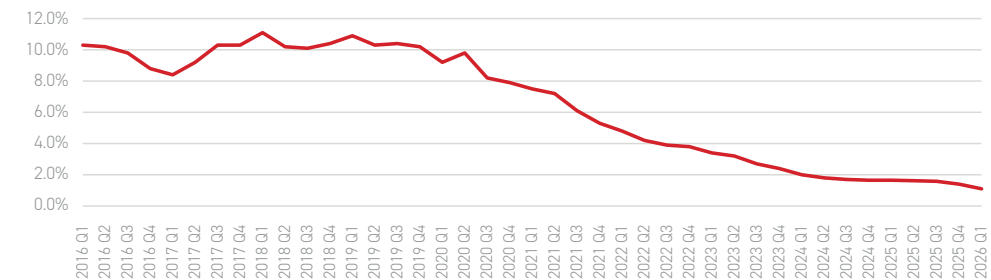
EXHIBIT 3: US DATA CENTER UNDER CONSTRUCTION, TOTAL VS. NON-PRE-LEASED



Source: datacenterHawk, Affinius Capital Research.

As a result of this historic supply and demand imbalance, vacancy rates across the US data center market have compressed. National vacancy declined to just 1.1% as of the first quarter of 2026, as shown in *Exhibit 4*, reflecting the limited amount of available commissioned capacity across the market. Conditions are even more constrained within the largest hyperscale markets, with vacancy rates sitting at just 0.3% in Northern Virginia and 0.4% in Columbus, the two largest markets in the US. Effectively all delivered capacity in these markets is being absorbed years in advance of delivery in order to secure future compute availability.

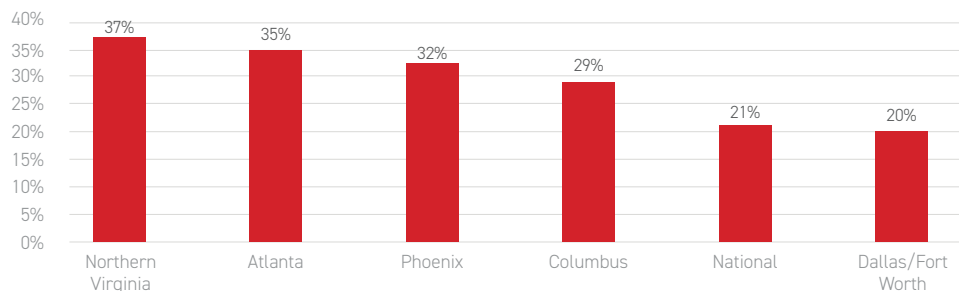
EXHIBIT 4: US DATA CENTER VACANCY RATES



Source: datacenterHawk, Affinius Capital Research.

This scarcity of available capacity has translated directly into accelerating rental growth across the sector. Hyperscale rents have increased 57% nationally since 2021 and 21% over the last two years alone. Rental growth has been strongest among the largest and most supply-constrained markets, as shown in *Exhibit 5*. Across markets, limited near-term power availability and historically low vacancy levels have strengthened landlord negotiating leverage, particularly for large-scale hyperscale deployments requiring significant contiguous capacity. As a result, new leasing activity is incorporating stronger contractual rent escalators and more favorable economic terms for owners than were common in prior market cycles. This evolution is particularly notable given the long-duration nature of hyperscale leases, where even modest increases in annual contractual growth rates can materially enhance long-term cash flow durability and asset valuation over time.

EXHIBIT 5: DATA CENTER RENTAL GROWTH, 2023 TO 2025



Source: datacenterHawk, Affinius Capital Research.

EXIT LIQUIDITY & INSTITUTIONALIZATION OF THE SECTOR

As the scale of data center development continues to expand, some investors have increasingly questioned whether sufficient institutional capital will exist to absorb stabilized assets over time. This concern is understandable given the unprecedented pace of growth currently underway. In our view, these concerns are more manageable when framed within the broader context of global real estate capital markets. Even if the global data center market were to approach approximately \$2 trillion in value by 2030, this would remain modest relative to the broader institutional real estate universe. By comparison, the US commercial real estate market alone exceeds approximately \$25 trillion in value, while only a small percentage of that asset base typically transacts in any given year. Even assuming data centers eventually transact at materially higher turnover rates than traditional property sectors, for example approximately 10% of the asset base annually, this would imply roughly \$200 billion of annual transaction volume globally. That level remains well within the capacity of existing institutional capital markets and is below the transaction volumes recorded by sectors such as industrial and multifamily during the last real estate cycle. For additional perspective, even the US office sector, despite facing significant structural

challenges in recent years, recorded approximately \$157 billion of trailing twelve-month transaction volume as of mid-2022. Framed this way, the scale of capital required to absorb stabilized data center assets appears considerably less extraordinary and more consistent with historical patterns of capital rotation across major property sectors.

Investor demand for digital infrastructure assets is already proving to be exceptionally deep. Despite relatively few owners electing to sell stabilized assets, private market transaction activity within the sector has averaged approximately \$88 billion annually over the past two years. Much of this activity has occurred through large-scale portfolio and platform transactions rather than individual asset sales, reflecting the strategic importance and scarcity value of scaled data center portfolios. Public market capital formation has also remained substantial, with data center REITs continuing to attract significant equity capital despite the broader increase in interest rates over the last several years. The recent IPO of Blackstone Digital Infrastructure Trust (BXDC) reflects this demand. Taken together, these trends suggest that institutional appetite for stabilized digital infrastructure is robust and that long-term demand for high-quality data center assets is likely to remain well supported as the sector continues to mature.

CONCLUSION

The US data center sector is undergoing a structural transformation from a specialized real estate niche into one of the foundational infrastructure layers of the modern economy. The rapid expansion of cloud computing and artificial intelligence is driving an unprecedented wave of digital infrastructure investment, while simultaneously reshaping power markets, development patterns, and capital allocation across the broader real estate landscape. Although the pace of growth has raised understandable questions around supply, power availability, and long-term capital formation, current market fundamentals continue to reflect exceptionally strong underlying demand supported by long-duration hyperscale leasing activity and historically constrained supply conditions.

Looking forward, the sector's evolution will likely be increasingly defined but by access to scalable power infrastructure and the ability to deliver energized capacity efficiently. As a result, data centers are increasingly exhibiting many of the characteristics associated with core infrastructure assets, including high barriers to entry, durable cash flows, and strategic economic importance. For institutional investors, this transition is broadening the role of digital infrastructure within long-term portfolio construction and reinforcing the growing importance of the sector within the global real asset universe.

ABOUT THE AUTHOR

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